



Condition-Based Maintenance *Plus* (CBM+)

A Department of Defense (DoD) Initiative

Department of the Army Mr. Steven V. Karl November 18, 2005







Outline

- >Origin
- > Elements
- >Components
- > Policy
- >Advisory Group and Awareness
- >Army CBM+ Plan and Select Programs
- > Related Efforts
- >Future & Summary
- >Questions & Contact Information?

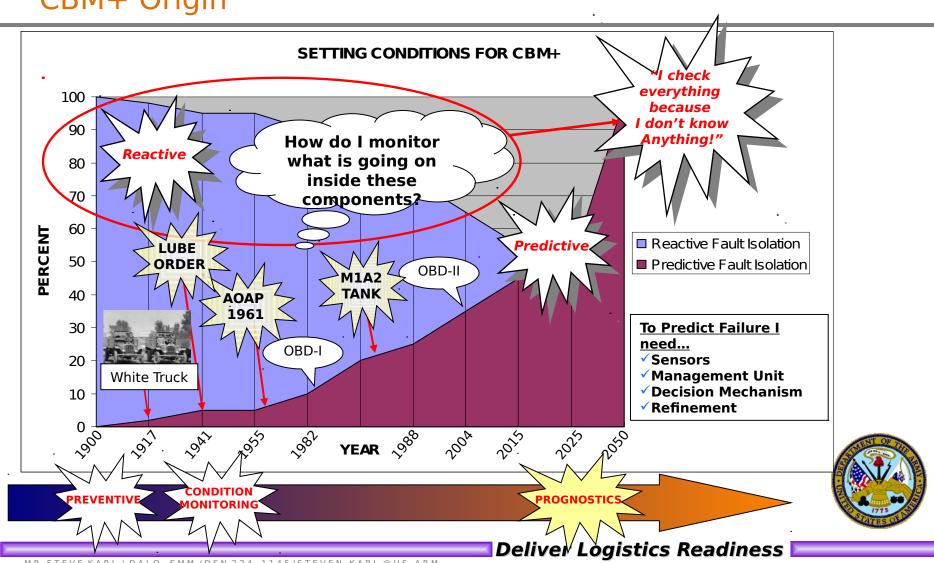


Deliver Logistics Readiness

MR. STEVE KARL / DALO- SMM /DSN 224-1145/STEVEN.KARL @US.A Y.MIL



CBM+ Origin





CBM+ Elements

CBM+ can include

Army Concept

Integrated Weapon System Status and Health Management

Self Monitoring

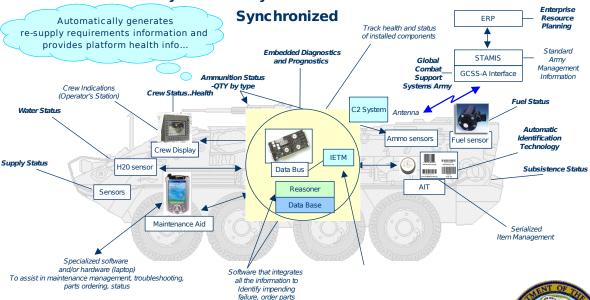
Sensors and algorithms

Sensor-Based Self Reporting > Data collection techniques_{Automatically feeds Army Shared Data Environment}

> Information tools

> Engineering analysis

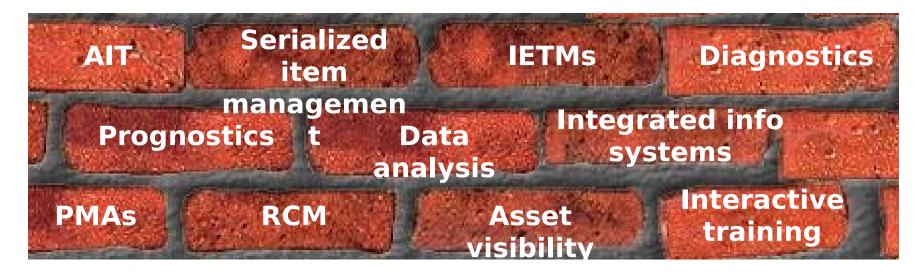
> System integration





CBM+ Components

CBM+ implements...*practices, techniques and technologies* that improve maintenance capabilities and execution







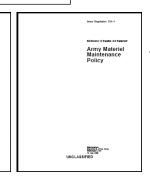
CBM+ Policy

CBM+ key policy tenets...

- Need-driven, reliability centered maintenance
- > Embedded diagnostics and prognostics
- >Automated maintenance information generation
- Trend-based reliability and sustainability process improvements
- Integrated information systems providing logistics response based equipment condition and tasking
- >Smaller maintenance and support footprints
- >Improved Operational availability









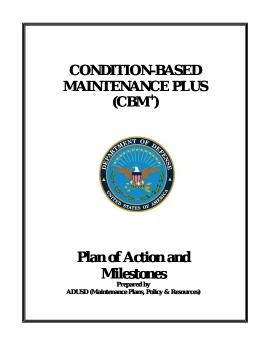




CBM+ Advisory Group and Awareness

CBM+ resources

- >Advisory Group membership
 - Working group under the Maintenance Technology Senior Steering Group (MTSSG)
 - OSD (chair), Joint Staff, Military Services, and the Defense Logistics Agency (DLA)
- Advisory Group Charter to share, coordinate, track and review.
- > Plan of Action and Milestones (POA&M)
- >Awareness
 - DoD Instruction 5000.2
 - DoD Directive 4151.18
 - Website http://www.acq.osd.mil/log/mppr







Army CBM+ Road Ahead

> Platform focused transformation

- Develop and field platform health management capability through integrated technologies linked in a Network Sustainment environment
- Managed through the Common Logistics Operating Environment (CLOE).

> Army CBM+ Select Programs

- Future Combat System (FCS)
- Apache
- Stryker

> Army Actions Working

- RAND Study "Developing a CBM-Based Total Future Maintenance Program"
- CASCOM CBM+ SMEs for doctrine & TTPs
- "Road Ahead Plan" TBD







CBM+ Related Efforts

CBM+ initiatives and related efforts...

- > Defense Advanced Research Projects Agency (DARPA)
- >Advanced Concept Technology Demonstrations (ACTD)
- > Commercial Technologies for Maintenance Activities (CTMA)
- >Industry and Academia
- >Corrosion Control
- > Joint Oil Analysis Program (JOAP)

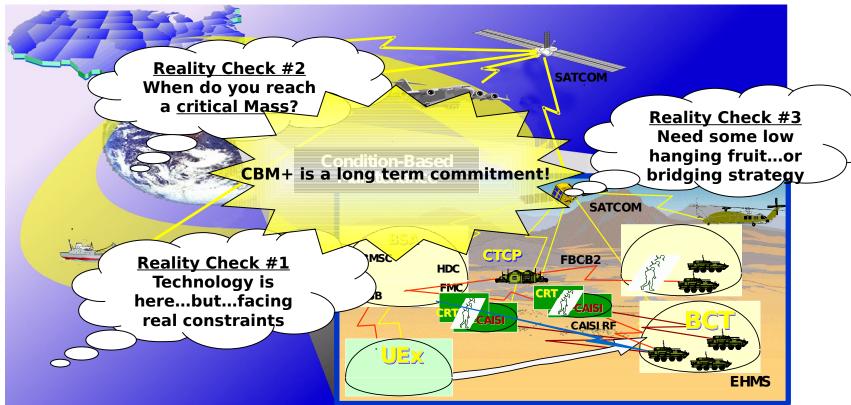


Deliver Logistics Readiness

MR. STEVE KARL / DALO- SMM /DSN 224-1145/STEVEN.KARL @US.A Y.MIL



CBM+ Future & Summary



CBM+ is proactive maintenance based on evidence of need performed by maintainers with the right knowledge, tools and support at the optimal time. TATES OF



Questions & Contact Information

>Questions?

>Contact Information:

Mr. Steven Karl

HQDA, ODCS, Army G-4, ATTN: DALO-SMM

500 Army Pentagon

Washington DC 20310-0500

(703) 614-1145

Email: Steven.Karl@us.army.mil



Deliver Logistics Readiness

MR. STEVE KARL / DALO- SMM /DSN 224-1145/STEVEN.KARL @ US.A Y MII